Don't Enter (SPE)

AMENDMENTS TO THE CLAIMS:

Claim 1. (Currently amended) A method of maintaining the order of nodes in a hierarchical document, comprising:

selecting a first parameter corresponding to a selected maximum fanout of ~~number of children for each node for~~ an auxiliary ordered tree;

selecting a second parameter corresponding to a selected number of sub-trees created after a split ~~a selected minimum number of children for each node of the auxiliary ordered tree~~;

building the auxiliary ordered tree having at least as many leaves as atoms within said hierarchical document based upon the first and second parameters;

attaching the atoms to the leaves of said auxiliary ordered tree;

labeling each of the nodes in the auxiliary ordered tree; and

communicating the labeled nodes of the auxiliary ordered tree to a user~~;~~

wherein said labels comprise integer numbers having a size that is bounded by said first parameter and said second parameter.

Claim 2. (Original) The method of claim 1, wherein the labeling of the nodes in the auxiliary tree is defined by:

$$N(root) = 0;$$

$$N(x) = N(y) + i \cdot (f - 1)^{h(x)}; \text{ and}$$

$$0 \leq i < f$$

Where:

N(x) is the label for node x;

x is the i^{th} child of y;

f is the maximum number of children per node; and

h(x) is the height of node x.

Claim 3. (Original) The method of claim 1, further comprising assigning labels to the atoms in the hierarchical document based upon the labels assigned to the corresponding leaves in the auxiliary ordered tree.